Options for Closing the Gap on Forestry Management Measures 2/11/2015

Background/Context

EPA and NOAA find that gaps in Oregon's coastal nonpoint program remain. Specifically, the State has not adopted additional management measures applicable to forestry that are necessary to achieve and maintain applicable water quality standards and protect designated uses. This paper describes how Oregon may strengthen and expand its forest management measures in its coastal nonpoint management area in ways that will achieve a healthy resilient coastal environment where forest management measures satisfy the statutory objectives of the Coastal Zone Act Reauthorization Amendments (CZARA).

General CZARA Guidelines for Approval

There are two pathways for states to achieve an approvable program: 1) a *regulatory program*; and/or 2) a *voluntary approach*. A voluntary approach requires that the State provide the following¹:

- a description of the voluntary programs, including the methods for tracking and evaluating those programs Oregon will use to encourage implementation of the management measures;
- a legal opinion from the attorney general or an attorney representing the agency with jurisdiction for enforcement that such authorities can be used to prevent nonpoint pollution and require management measure implementation, as necessary; and
- a description of the mechanism or process that links the implementing agency with the enforcement agency and a commitment to use the existing authorities where necessary.

Options for Oregon to Satisfy its CZARA Requirement to Adopt Additional Management Measures for Forestry

Riparian Protection

- Small and Medium Fish-Bearing Streams: State currently pursuing regulatory program:
 - o <u>Current Deficiencies/Shortfall:</u> Inadequate riparian protection for small and medium fish-bearing streams. Available data, including Ripstream Study data and

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¹ See NOAA and EPA's 2001 memo on Enforceable Policies and Mechanisms for State Coastal Nonpoint Source Programs. http://coast.noaa.gov/czm/pollutioncontrol/media/epmmemo.pdf

analysis, shows that current Oregon Forest Practices Act measures do not ensure that forest operations meet Oregon's narrative water quality criterion for protecting cold water (PCW) in small and medium fish-bearing streams. Importantly, unlike the PCW criterion, the CZARA program requirements are not limited to waters currently inhabited by threatened or endangered salmonid fishes, so this deficiency in protecting existing cold water applies to other small and medium fish-bearing streams across the coastal nonpoint management area, as well.

State Actions Needed: 1) Complete riparian rulemaking by July 1, 2016; 2) Rule should be designed to meet the PCW criterion in all small and medium fish bearing streams and upstream waters supporting the PCW criterion; and 3) The rule should also include a means to monitor whether forest operations are complying with the PCW criterion.

• Non-Fish-Bearing Streams: State may pursue regulatory and/or voluntary approaches:

Current Deficiencies/Shortfall: The Oregon Forest Practices Rules do not require riparian vegetation protections for small type N streams in the Coast Range (reference: Table 5 for OAR 629-640-0200(6) – "Vegetation Retention for Specified Small Type N Streams" provides that "no vegetation" is required for the Coast Range). The RipStream Study results, and earlier studies, show that the State's current Forest Practices Act measures on private forest land, including in the Coast Range (which encompasses most of the coastal nonpoint program management area), do not ensure that the State's water quality standards are being met.

<u>State Action Needed</u>: **By July 1, 2016,** revise and implement additional management measures for riparian areas adjacent to small non-fish-bearing streams necessary to achieve and maintain water quality standards, including the PCW criterion, and protect designated uses. This could be through regulatory or voluntary means (or a combination of both).

<u>Voluntary</u>—If the State choses a voluntary approach to meet all or part of the nonfish bearing streams requirement, the State must also meet the following: **By July 1, 2016**, Oregon must demonstrate how it is showing compliance with elements of a voluntary program (see "General CZARA Guidelines for Approval" section above or NOAA and EPA's 2001 memo on Enforceable Policies and Mechanisms for State Coastal Nonpoint Source Programs,

http://coast.noaa.gov/czm/pollutioncontrol/media/epmmemo.pdf, and NOAA and EPA's 1995 "Flexibility for State Coastal Nonpoint Programs",

http://coast.noaa.gov/czm/pollutioncontrol/media/6217flexibilityguidance.pdf, including identification of enforceable "backstop" authorities that will be effective in achieving widespread implementation of the management measures. Such existing general authorities could include "bad actor" laws, enforceable

water quality standards, general environmental laws and prohibitions, and other existing authorities that will accomplish the implementation of the management measures without requiring new, more specific authorities).

• Forestry Roads: Regulatory and/or voluntary approaches would need to address the following items:

- o <u>Current Deficiencies/Shortfall:</u>
 - Regulatory Recent rule changes and new policies do not sufficiently address water quality impairments associated with "legacy" roads, (i.e., abandoned roads created prior to the Forestry Practices Act that would not meet current State requirements with respect to siting, construction, maintenance, and road drainage) or impairments associated with the portion of the existing network where construction or reconstruction is not proposed.
 - Voluntary –ODF's voluntary program does not adequately address legacy roads, nor has the State satisfied all elements needed for a voluntary program (see above).
- o Examples of State Actions Needed:
 - Regulatory By July 1, 2016, establish regulations and or policies that address the above deficiencies. Or,
 - Voluntary **By July 1, 2016**, 1) establish a road survey or inventory program that considers active, inactive, and legacy/old roads that have the potential to deliver sediment to streams; 2) develop a ranking system to establish priorities for road repair or decommissioning; 3) develop a timeline for addressing priority road issues; and 4) develop a public reporting and tracking component to assess progress for remediating identified forest road problems.

For an effective voluntary approach, all are needed as a package. The State must also meet other elements needed for a voluntary program (see General CZARA Guidelines for Approval section above or NOAA and EPA's 2001 memo on Enforceable Policies and Mechanisms for State Coastal Nonpoint Source Programs

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- Protection of Landslide-Prone Areas: Regulatory and/or voluntary approach would need to address the following items:
 - o Current Deficiencies/Shortfall:
 - Regulatory Oregon's current rules protect for public safety against shallow, rapidly moving landslides. Oregon does not have additional

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management measures for forestry in place to protect high-risk landslide areas to ensure water quality standards are met and designated uses are protected. While a natural rate of landslide activity is not preventable, and is even desirable to provide large woody debris to enhance habitat complexity and value, there needs to be a balanced program that prevents human-induced landslide activity that adds excessive sediment to streams, or degrades streams through debris flows, impairing water quality and blocking or impairing salmon habitat.

Voluntary – The voluntary measure identified by the State gives landowners credit for leaving standing live trees in landslide prone slopes as an eventual source of large wood for fish-bearing streams. NOAA and EPA do not consider this voluntary action a sufficient management measure to reduce high-risk landslides that adversely affect water quality standards or designated uses. While this is a good management practice, the measure is not designed to prevent human-induced landslides, but rather to ensure large wood is available to provide additional stream complexity when a landslide occurs. In addition, the State has not demonstrated that its voluntary measure is effective in controlling the rate of human-induced landslides and debris flows. Furthermore, the State has not explained how it will monitor and track the implementation and effectiveness of voluntary measures; identified any enforceable back-up authority to ensure implementation of the voluntary measures; or provided a commitment to rely on that back-up authority to ensure effective implementation.

o Examples of State Actions Needed:

- Regulatory By July 1, 2016, establish a program that includes a scientifically rigorous process for identifying high-risk areas and unstable slopes based on field review by trained staff and making maps of high-risk landslide areas available to foresters during harvest planning. Adopt BMPs to protect high-risk landslide areas that have the potential to impact water quality and designated uses, such as no-harvest restrictions on high-risk areas and ensuring that roads are designed, constructed, and maintained in such a manner that the risk of triggering slope failures is minimized.
- Voluntary By July 1, 2016, the State could pursue several actions that would collectively address this issue such as: 1) Develop a scientifically rigorous process for identifying high-risk areas and unstable slopes based on field review by trained staff. 2) Develop robust voluntary programs to encourage and incentivize the use of forestry BMPs to protect high-risk landslide areas that have the potential to impact water quality and designated uses, such as no-harvest restrictions on high-risk areas and ensuring that roads are designed, constructed, and maintained in such a

manner that the risk of triggering slope failures is minimized. Wide dissemination of maps of high-risk landslide areas could improve water quality by informing foresters during harvest planning. 3) Institute a monitoring program to track compliance with the FPA rules and voluntary guidance for high-risk landslide-prone areas and the effectiveness of the practices in reducing slope failures. Identify ODF and DEQ general authorities for enforcing changes when voluntary measures are not implemented. 4) Integrate processes to identify high-risk landslide prone areas and specific BMPs to protect these areas into the TMDL development process.

For all voluntary programs, the State must meet all elements needed for a voluntary program (see General CZARA Guidelines for Approval above or NOAA and EPA's 2001 memo on Enforceable Policies and Mechanisms for State Coastal Nonpoint Source Programs (http://coast.noaa.gov/czm/pollutioncontrol/media/epmmemo.pdf).

- Spray Buffers for Aerial Application of Herbicides on Non-Fish-Bearing Streams: regulatory and/or voluntary approaches that could be established include the following items:
 - o Current Deficiencies/Shortfall:
 - Regulatory The State does not have any "no-spray buffer" requirements to protect non-fish-bearing streams when herbicides are aerially applied.
 - *Voluntary* –Voluntary no-spray buffers do not exist, nor is there monitoring and tracking on non-fish-bearing streams.
 - Examples of State Actions Needed:
 - Regulatory By July 1, 2016, 1) adopt rules for aerial herbicide spray buffers for small, non-fish-bearing streams; or 2) adopt riparian buffer protections for timber harvest along non-fish-bearing streams that are also designated no-spray buffers, provided such buffers are sufficiently wide to reduce pesticide loading in these streams during and shortly after aerial spraying; Or
 - Voluntary **By July 1, 2016,** 1) expand existing guidelines to create and maintain voluntary buffers for the aerial application of herbicides on nonfish-bearing streams and educate and train applicators on the new guidance; 2) monitor and track that voluntary guidelines are followed; 3) identify ODF and DEQ general authorities for enforcing changes when voluntary measures are not implemented; 4) revise the ODF Notification of Operation form to include a check box for aerial applicators to acknowledge the need to comply with FIFRA labels, especially for herbicides that are prohibited from use in/above waterbodies, for all

stream types, including non-fish-bearing streams; and 5) track and evaluate the implementation of voluntary measures for the aerial application of herbicides along non-fish bearing streams to assess the effectiveness of these practices.

For all voluntary programs, the State must meet all elements needed for a voluntary program (see General CZARA Guidelines for Approval above or NOAA and EPA's 2001 memo on Enforceable Policies and Mechanisms for State Coastal Nonpoint Source Programs (http://coast.noaa.gov/czm/pollutioncontrol/media/epmmemo.pdf).

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Comment [PC1]: The purpose of this document was to summarize the options that the State could pursue to address the gaps in forestry management measures. CZARA requires that the gaps be addressed through either a regulatory program or voluntary program. The specific substance options in this summary discussion document are "options" not have to dos. The only have to do is to address the gaps and to do so either through a regulatory or voluntary program.

Ex. 5 - Deliberative

Comment [AC3]: This statement comes directly from the opening para. of our decision doc. The lang, related to WQS and designated uses is what CZARA requires of us and cannot be stricken and replaced with "healthy watershed" as the State proposed, since that is inconsistent with statutory requirements of the program.

Comment [AC4]: I see this as an important distinction to show that is not just strengthening existing MMs but developing additional ones too, as they were conditioned to do.

¹ See NOAA and EPA's 2001 memo on Enforceable Policies and Mechanisms for State Coastal Nonpoint Source Programs. http://coast.noaa.gov/czm/pollutioncontrol/media/epmmemo.pdf

analysis, shows that current Oregon Forest Practices Act measures do not ensure that forest operations meet Oregon's narrative water quality criterion for protecting cold water (PCW) in small and medium fish-bearing streams. Importantly, unlike the PCW criterion, the CZARA program requirements are not limited to waters currently inhabited by threatened or endangered salmonid fishes, so this deficiency in protecting existing cold water applies to other small and medium fish-bearing streams across the coastal nonpoint management area, as well.

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Comment [PC5]: Is this level of specificity needed in terms of areal scope? Concern is that additional protections may be needed not only in currently identified salmon, steelhead and bull trout habitat, but also in areas historically occupied by these species but no longer supportive of habitat conditions due to poor practices. Additionally, there may be streams that have these species but have not yet been identified. In short, concerned that this may imply/impose an inappropriate constraint on where protections will be applied.

Ex. 5 - Deliberative

Comment [HA7]: The Oregon Forest Practices Rules do not require riparian vegetation protections for type N streams in the Coast geographic region.

Ex. 5 - Deliberative

Ex. 5 - Deliberative

Comment [AC10]: This statement is now consistent with statements made in our decision doc (see last full para. on pg. 7). State's rewrite (which I changed) was not.

Comment [AC11]: Listing these as "examples" of State actions needed was not appropriate as these are MUSTS not optional, if a State pursues a voluntary approach.

Therefore, I have reframed as noted.

Comment [AC12]: This is encompassed by "compliance with elements of a voluntary program so not do need to restate).

Comment [d13]: How is compliance determined? Is it buffers of a certain distance everywhere all the time or an approach that achieves the outcome of cold water and habitat?

Comment [AC14]: See bullets outlining requirements for voluntary programs under CZARA under "General CZARA Guidances for Approval" on first page.

Comment [PC15]: Compliance will depend on what sort of guidelines or requirements the State establishes and what level of flexibility it builds into those guidelines for site specific reasons. What we expect here is for the state [... [3]]

water quality standards, general environmental laws and prohibitions, and other existing authorities that will accomplish the implementation of the management measures without requiring new, more specific authorities).

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 - Voluntary ODF's voluntary program does not adequately address legacy roads, nor has the State satisfied all elements needed for a voluntary program (see above).
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 - Voluntary By July 1, 2016, 1) establish a road survey or inventory program that considers active, inactive, and legacy/old roads that have the potential to deliver sediment to streams; 2) develop a ranking system to establish priorities for road repair or decommissioning; 3) develop a timeline for addressing priority road issues; and 4) develop a public reporting and tracking component to assess progress for remediating identified forest road problems.

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Comment [AC16]: This phrasing is inconsistent with how this section is structured elsewhere in the document. This summary of current deficiencies needs to reflect statements from our decision doc. Therefore is it implied that NOAA and EPA found And it does not need to be stated. I disagree with the State's word choice of "NOAA and EPA believe". We shouldn't let the State put words in our mouth here.

Comment [d17]: Or "it cannot be determined if the voluntary program adequately addresses legacy roads"

Comment [AC18]: This sentence does not belong in a section titled "Current Deficiencies/Shortfalls"

Ex. 5 - Deliberative

Ex. 5 - Deliberative

management measures for forestry in place to protect high-risk landslide areas to ensure water quality standards are met and designated uses are protected. While a natural rate of landslide activity is not preventable, and is even desirable to provide large woody debris to enhance habitat complexity and value, there needs to be a balanced program that prevents human-induced landslide activity that adds excessive sediment to streams, or degrades streams through debris flows, impairing water quality and blocking or impairing salmon habitat.

Voluntary – The voluntary measure identified by the State gives landowners credit for leaving standing live trees in landslide prone slopes as an eventual source of large wood for fish-bearing streams. NOAA and EPA do not consider this voluntary action a sufficient management measure to reduce high-risk landslides that adversely affect water quality standards or designated uses. While this is a good management practice, the measure is not designed to prevent human-induced landslides, but rather to ensure large wood is available to provide additional stream complexity when a landslide occurs. In addition, the State has not demonstrated that its voluntary measure is effective in controlling the rate of human-induced landslides and debris flows. Furthermore, the State has not explained how it will monitor and track the implementation and effectiveness of voluntary measures; identified any enforceable back-up authority to ensure implementation of the voluntary measures; or provided a commitment to rely on that back-up authority to ensure effective implementation.

Examples of State Actions Needed:

- Regulatory By July 1, 2016, establish a program that includes a scientifically rigorous process for identifying high-risk areas and unstable slopes based on field review by trained staff and making maps of high-risk landslide areas available to foresters during harvest planning. Adopt BMPs to protect high-risk landslide areas that have the potential to impact water quality and designated uses, such as no-harvest restrictions on high-risk areas and ensuring that roads are designed, constructed, and maintained in such a manner that the risk of triggering slope failures is minimized.
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Comment [AC21]: Now the statement is consistent with our decision doc. Yes, the State hasn't satisfied the requirements for a voluntary program but the bigger issue here is that the State hasn't demonstrated it has any voluntary measures are that acceptable.

Comment [HA22]: I support Allison's point. The leave trees in the landslide prone areas are intended to become a source of large wood for downstream fish streams. This measure isn't necessarily intended to prevent landslides that impact water quality.

Comment [WD23]: From Jeff Lockwood: "The nonvoluntary measures should be at least as specific as the voluntary measures."

Comment [AC24]: The decision doc. doesn't state that OR has to do all of the voluntary approaches.

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manner that the risk of triggering slope failures is minimized. Wide dissemination of maps of high-risk landslide areas could improve water quality by informing foresters during harvest planning. [3) Institute a monitoring program to track compliance with the FPA rules and voluntary guidance for high-risk landslide-prone areas and the effectiveness of the practices in reducing slope failures. Identify ODF and DEQ general authorities for enforcing changes when voluntary measures are not implemented. 4) Integrate processes to identify high-risk landslide prone areas and specific BMPs to protect these areas into the TMDL development process.

Comment [WRM*G25]: Not really voluntary, and will slow down overall progress significantly.

For all voluntary programs, the State must meet all elements needed for a voluntary program (see General CZARA Guidelines for Approval above or NOAA and EPA's 2001 memo on Enforceable Policies and Mechanisms for State Coastal Nonpoint Source Programs (http://coast.noaa.gov/czm/pollutioncontrol/media/epmmemo.pdf).

Ex. 5 - Deliberative

- Spray Buffers for Aerial Application of Herbicides on Non-Fish-Bearing Streams: regulatory and/or voluntary approaches that could be established include the following items:
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 - Voluntary By July 1, 2016, 1) expand existing guidelines to create and maintain voluntary buffers for the aerial application of herbicides on non-fish-bearing streams and educate and train applicators on the new guidance; 2) monitor and track that voluntary guidelines are followed; 3) identify ODF and DEQ general authorities for enforcing changes when voluntary measures are not implemented; 4) revise the ODF Notification of Operation form to include a check box for aerial applicators to acknowledge the need to comply with FIFRA labels, especially for herbicides that are prohibited from use in/above waterbodies, for all

Comment [WS27]: Verify the implication that fish bearing streams are adequately protected.

Ex. 5 - Deliberative

Comment [AC29]: This statement is not consistent with the decision doc.

Comment [WD30]: Scott Hecht (NMFS) agrees. He said "FIFRA labeling requirements are the law and pesticide applicators are required to adhere to them and to take training on how to follow labels. So, not sure this sentence adds much that isn't already being done. Additionally, NMFS has found that labeling is not always protective of salmonids and their habitats. Recommend omitting."

Comment [AC31]: I think we really need to provide an example of how we'd like to see it expanded now.

5

stream types, including non-fish-bearing streams; and 5) track and evaluate the implementation of voluntary measures for the aerial application of herbicides along non-fish bearing streams to assess the effectiveness of these practices.

For all voluntary programs, the State must meet all elements needed for a voluntary program (see General CZARA Guidelines for Approval above or NOAA and EPA's 2001 memo on Enforceable Policies and Mechanisms for State Coastal Nonpoint Source Programs (http://coast.noaa.gov/czm/pollutioncontrol/media/epmmemo.pdf).

Comment [AC32]: The decision doc also includes this.

Page 2: [1] Comment [WS6]

Will.Stelle

2/6/2015 3:21:00 PM

Ex. 5 - Deliberative

Page 2: [2] Comment [AC9]

Allison Castellan

2/6/2015 3:21:00 PM

Ex. 5 - Deliberative

Page 2: [3] Comment [PC15]

Psyk, Christine

2/6/2015 3:21:00 PM

Compliance will depend on what sort of guidelines or requirements the State establishes and what level of flexibility it builds into those guidelines for site specific reasons. What we expect here is for the state to provide a description of the elements of the voluntary program they will adopt if they choose to go the voluntary program route.

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